

ACCESS TO: Front Only	PHASE: 3P4W
CLASS: 2	AMPERE: 2000A
LABEL: U/L SE	BUS MTL: Al 750A/in ²
VOLTAGE: 480/277V	PLATE: Tin Plate
STYLE: ReliaGear	RATING: Fully Rated
BUS BRACING (RMS SYM):	65000A
DEV.MIN.INT.RATING (RMS SYM):	65000A

SwitchBoard / Device Information

Circuit No.	Device	Trip Amps	Sensor Amps	Poles	Nameplates	Lugs/Cable Size	Notes
1	XT5H	600	600	3		(2) - 2/0 - 500 MCM AL - Mech. AL	17,19,20,21,23
2	XT5H	600	600	3		(2) - 2/0 - 500 MCM AL - Mech. AL	17,19,20,21,23
3	XT5H	600	600	3		(2) - 2/0 - 500 MCM AL - Mech. AL	17,19,20,21,23
4	XT5H	600	600	3		(2) - 2/0 - 500 MCM AL - Mech. AL	17,19,20,21,23
5	XT5H	600	600	3		(2) - 2/0 - 500 MCM AL - Mech. AL	17,19,20,21,23
6	XT1H	15	-	3		(1) - #10 - 2/0 AWG CU - Mech. AL	21,25
7	FBN6	15	-	1		(1) - #14 - #10 AWG CU - Mech. AL	
8	FBN6	15	-	2		(1) - #14 - #10 AWG CU - Mech. AL	
9	FBN6	15	-	1		(1) - #14 - #10 AWG CU - Mech. AL	
10	XT7H	1000	1200	3		(4) - 4/0 - 500 MCM AL - Mech. AL	13,15,18,21,22,24,26
Main	E2.2SF	2000		3			11,12,13,14,16,18,27,28,29,30,33,34,35,36

NOTES:

- Switchboard furnished with a rainproof TYPE 3R (non-walk-in) enclosure.
NOTE: See plan view for details. Need additional 1 inch space clearance on top and 1.5 inch clearance on the rear of the swbd.
- Equipment ground bus furnished with lugs.
- Switchboard qualified for Seismic Ratings per publication DET-463 and OSP-0044-10.
- Shipping splits between each section, ship each section separately.
- Switchboard furnished with section space heaters.
- Switchboard furnished with thermostat control for section space heaters.
- Switchboard furnished with lightning arrestor.
- Switchboard furnished with hinged gutter covers.
- Switchboard furnished with fully rated panel.
- User Specified Layout
- Device is 100 percent rated.
- Device furnished with 120V electric operator.
- Device is furnished with integral ground fault protection.
- Device is furnished with RELT (Reduced Energy Let Through).
- 4 wire GROUND FAULT Load.
- Device requires RELT or ZSI feature if Authority having jurisdiction has adopted NEC 2014 code requirements.
- Device Furnished with Ekip Touch (LSI) Programmer.
- Device Furnished with Ekip Hi-Touch (LSIG) Programmer.
- Device Furnished with (1) Open/close 250V AC/DC Auxiliary Contact + (1) Trip Signaling 250V AC/DC Auxiliary Contact.
- Device Furnished with Ekip Com Modbus TCP/IP over CAT5/6 cable
- Device Furnished with PII Fixed Padlock - Open
- Device Furnished with Shunt Trip - 110-120V AC/DC
- Device Furnished with Shunt Trip - 110-127V AC / 110-125V DC
- Device Furnished with 110-125V AC/DC motor operator
- Device Furnished with Thermal-Magnetic Fixed Trip.
- Device furnished with (4Q) Auxiliary Contacts - 24V
- Device furnished with (YR) Remote Reset - 110V AC/DC
- Device furnished with (YC) Closing Coil - 110-120V AC/DC

PROJECT NAME :

CUSTOMER:



Industrial
Solutions by ABB

DRAWING TITLE: Device
Information

CREATED BY:

DATE: 03/02/2021 19:13:55

REVISION NO.: 55

PRODUCT NAME:

ReliaGear
Switchboard

DRAWING NO:

ITEM NO: 3

MARKS:

QUOTE NO:

SHEET: 1 of 5

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Switchboard / Device Information

NOTES: (continued)

30. Device furnished with (YO) Opening Coil - 110-120V AC/DC
31. Estimated total factory connected wiring points for the lineup 95.
32. Estimated shipping weight for the lineup is 1967 lbs.
33. Device furnished with DC Supply - 24V - 48V
34. Device furnished with RELT-Ekip Signalling 2K3
35. Device furnished with Charging motor/Ekip com actuator - 100-130V AC
36. Device furnished with 1% accuracy Measuring Package
37. Miscellaneous Add-Ons:

- 3 Current Transformer (CT) 2000:5A (Non Revenue Grade)
- 3 Potential Transformer (PT) (.6% Accuracy) (Single PT) (Component Only)
- 1 MOXA UC-3111-T-US-LX-QTC-ABB
- 1 SOLA POWER SUPPLY
- 1 1KVA UPS (needs 14H cover)
- 1 Basler 32R relay BE1-32RD1EE1PA0S0F
- 2 Upsize to 3000A phase bus
- 2 Upsize to 3000A neutral bus
- 1 MOXA LPS69273NT-61SMAM antenna and RG58U-4-SMSF antenna cable
- 1 // ADD HUMISTAT TO HEATER CIRCUIT

38. Due to the presence of Miscellaneous Add-Ons, please review drawings with the factory to ensure accuracy.

39. Drawing Notes:

NEMA 3R to have rearward sloping roof. Insect screens on NEMA 3R enclosure over vent openings

Switchboard Doors: Open 90 degrees, can do split doors for 35" wide and wider sections

Factory installed 120V GFI 20A receptacle, need wire rated for 20Amp, behind any NEMA 3R doors

Ekip Com to be Modbus TCP/IP over CAT 5/6 cable

Utility main: Load control algorithm (based on ekip trip units). Trip unit for main to have

power controller, 10K-2 device, breaker to have EKIP link communication module

Utility Main breaker power control algorithm installed

Load control scheme: EKIP Signaling 1K-1 XT5-INT for all charger feeder breakers 1SDA105201R1

Breaker logic needs to be outage resilient, meaning breakers need to be able to communicate

status even in the event of an outage or after opening or trip. Provide UPS to accomplish.

Use UPS for control power ride through on utility main due to reverse power shut off.

Reverse power via relay when battery breaker in scope.

1200Amp main breaker to be EMAX 1.2, 2000A to be EMAX 2.2,

3000A to be EMAX 4.2, 4000A to be EMAX 6.2

Battery back feed breaker with GF to be at end of bus, opposite end from utility main

XT7M to be 1200Amp frame with a 1000Amp rating plug

Battery Breaker: LSIG branch breaker to be XT7M with ability to remotely operate

Main breaker and battery breaker (when in scope) to have Hi Touch trip units.

600Amp branch breakers to have Touch trip units when battery breaker in scope.

600Amp branch breakers to have thermal magnetic trip units when no battery breaker in scope.

EKIP Connect free downloadable software needed for all field technicians

Provide dual rated CU/AL lugs on the branch breakers.

All doors to be split doors

Dimensional notes for scopes:

PROJECT NAME :		DRAWING TITLE: Device Information	PRODUCT NAME:	DRAWING NO:
CUSTOMER:		CREATED BY:	ReliaGear	ITEM NO: 3
		DATE: 03/02/2021 19:13:55	Switchboard	MARKS:
		REVISION NO.: 55		QUOTE NO:
			SHEET:	2 of 5

ACCESS TO: Front Only	PHASE: 3P4W
CLASS: 2	AMPERE: 2000A
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Switchboard / Device Information

Width: 1200A and 2000A main breaker section 30" wide when combined with utility doors, else 35"

Width: 3000A main breaker section 35" wide, 4000A 45" wide.

Depth: 1200A and 2000A depth 35", 3000A depth 40", 4000A depth 50"

Horizontal and neutral bus to be oversized when battery breaker in scope (BESS)

Horizontal bus to be 2000A for 1200A Main breaker, 3000A for 2000A Main breaker when BESS

Horizontal bus to be 4000A for 3000A Main breaker, 5000A for 4000A Main breaker when BESS

Vertical bus in distribution section to be 2000Amp for 1200Amp Main breaker when BESS.

Notes for short scopes when applicable:

Short board max panel height is 32X, Full height max panel height 40X

We can not offer reduced height switchboards for some utilities if CT compartment in switchboard

Examples EUSERC, PEPCO, Dominion due to minimum cable bending space required

38. As a result of Drawing Notes, this product may require modification to reflect correct footprint, price, cycle or UL certification.

PROJECT NAME :

CUSTOMER:



Industrial
Solutions **by ABB**

DRAWING TITLE: Device
Information

CREATED BY:

DATE: 03/02/2021 19:13:55

REVISION NO.: 55

PRODUCT NAME:

ReliaGear
Switchboard

DRAWING NO:

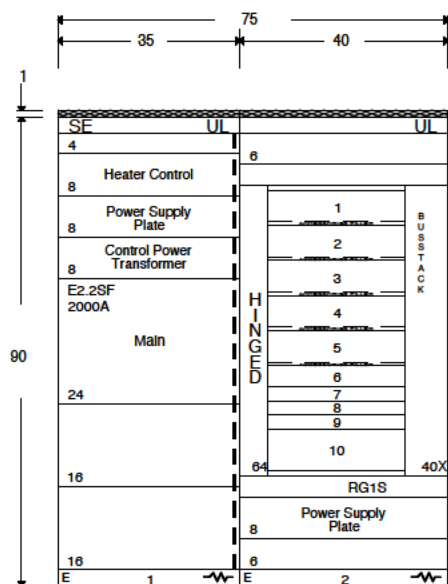
ITEM NO: 3

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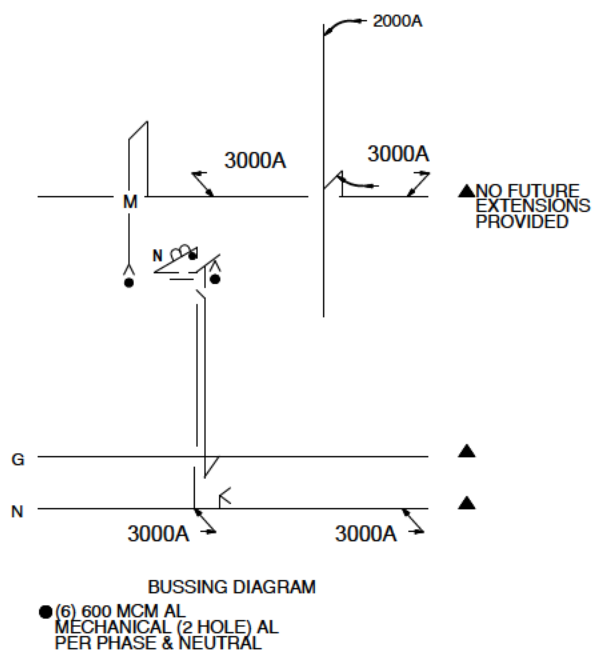
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717 lbs
(Est.)

FRONT VIEW

1164 lbs
(Est.)



PROJECT NAME :
[REDACTED]
CUSTOMER:
[REDACTED]



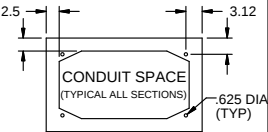
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DRAWING TITLE: Front View/
Bussing
CREATED BY: [REDACTED]
DATE: 03/02/2021 19:13:55
REVISION NO.: 65

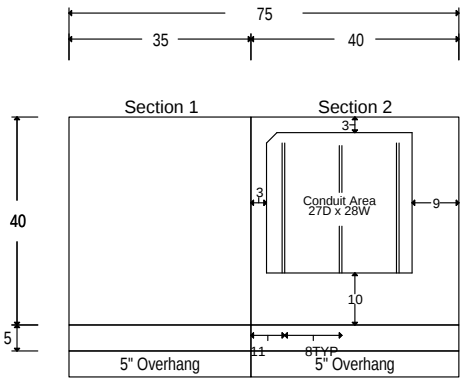
PRODUCT NAME:
ReliaGear
Switchboard

DRAWING NO:
ITEM NO: 3
MARKS: [REDACTED]
QUOTE NO: [REDACTED]
SHEET: 4 of 5

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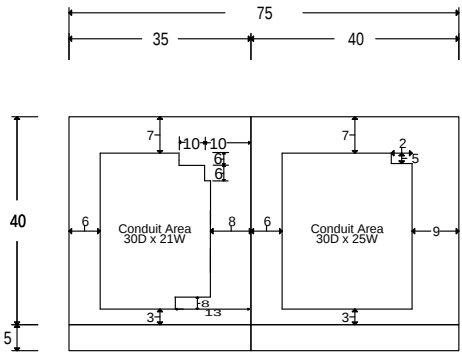


Top Conduit Area



Front Plan View

Bottom Conduit Area



Front Plan View

PROJECT NAME : [REDACTED]	 Industrial Solutions by ABB	DRAWING TITLE: Conduit View	PRODUCT NAME:	DRAWING NO:
CUSTOMER: [REDACTED]		CREATED BY: [REDACTED]	ReliaGear	ITEM NO: 3
		DATE: 03/02/2021 19:13:55	Switchboard	MARKS: [REDACTED]
		REVISION NO.: 55		QUOTE NO: [REDACTED]
				SHEET: 5 of 5